

Curriculum Vitae:

VALERI A KORNEEV

Education:

Ph.D. 1987 Leningrad University Graduate School of Geophysics

M.S. 1978 Leningrad State University, Department of Physics

Research Career:

2000 - Present	Geological Staff Scientist, Lawrence Berkeley Laboratory, University of California, USA
1992-2000	Staff Scientist, Lawrence Berkeley Laboratory, University of California, USA
1991-1992	Research Associate, University of California, Berkeley, California, USA
1990-1991	Visiting Professor, University of California, Berkeley, California, USA
1986-1990	Senior Research Scientist, Physics Research Institute, Leningrad State University
1978-1985	Research Scientist, Physics Research Institute, Leningrad State University

Research Interests:

Computer modeling of elastic wave propagation in 2D and 3D for complex heterogeneous media. Designing seismic field experiments. Direct and inverse problems of seismic waves propagation. Propagation of seismic waves in waveguides. Propagation of elastic waves in the media with local heterogeneities. Development of algorithms and computer programs for seismic data processing. Seismic diffraction tomography. Theory of scattering and attenuation of seismic waves. Canonical diffraction problem for elastic sphere and its geophysical applications. Tube wave monitoring. Nonlinear theory of dynamic elasticity, elastic waves interaction. Seismic monitoring using powerful vibro-sources. Earthquake prediction. Seismic resonant emission: theory and applications.

Recent and Relevant Publications:

Korneev, V., 2009, Resonant seismic emission of subsurface objects: *Geophysics*, Vol. 74, No 2, 47-53, 10.1190/1.3068448

Korneev, V. A., Ponomarenko, A. A. and B.M. Kashtan, 2009, Stoneley guided waves: What is missing in Biot's theory?: *Poromechanics IV*, DEStech publ., 706-711.

Korneev, V., 2009, Spherical wave propagation in a nonlinear elastic medium, LBNL report, LBNL-2509E.

Korneev, V. A, 2008, Slow Waves in Fractures Filled With Viscous Fluid: *Geophysics*, Vol. 73, No 1, 1-7.

Bakulin, A.V. and V.A. Korneev, 2008, Acoustic signatures of cross-flow behind casing in commingled reservoirs: A case study from Teapot Dome: *Geophysics*, Vol.73, No. 4, 1-8, 10.1190/1.2940154

Valeri Korneev; Andrey Bakulin and Jorge Lopez, 2008, Imaging and monitoring with Virtual Sources on synthetic 3D dataset from Middle East, 78th Annual International Meeting, SEG.

Tatanova, M.; Bakulin, A., Mehta, K., Korneev, V, and B. Kashtan, 2008, Reconstructing head waves with Virtual source method, 78th Annual International Meeting, SEG.

Bakulin, A.V. and V. A. Korneev, 2008, Acoustic signatures of cross-flow behind casing in commingled reservoirs: A case study from Teapot Dome: *Geophysics*, Vol.73, No. 4, 1-8, 10.1190/1.2940154

Korneev, V.A, 2008, Slow Waves in Fractures Filled With Viscous Fluid: *Geophysics*, Vol. 73, No 1, 1-7.

Korneev, V.A. and A.V. Bakulin, 2006, On the Fundamentals of the Virtual Source Method, *Geophysics*, Vol.71, No. 3, P.A13-A17, 10.1190/1.2196868.

Silin, D. B., Korneev, V. M., Goloshubin, G. M., and Patzek, T. W. , Low-frequency asymptotic analysis of seismic reflection from a fluid-saturated medium. *Transport in Porous Media*, 2006, 62: p. 283–305, LBNL-54955

Goloshubin, G.M., V. Korneev, D. Silin, V. Vingalow, and C. VanSchuyer, 2006, Reservoir imaging using low frequencies of seismic reflections. *The Leading Edge*, 25 (5), 527-531.

Kirukhin, A. V. , Korneev, V.A. and A.Yu. Poliakov, 2006, On a possible connection of strong earthquakes with anomalous pressure changes in a two-phase geothermal reservoir: *Volcanology and Seismology*, 6, p. 3-11, LBNL-61072

Korneev, V. A.; 2006, Seismicity Precursors of M6.0 2004 Parkfield and M7.0 1998 Loma Prieta Earthquakes, Lawrence Berkeley National Laboratory, Scientific report, LBNL-60012

Bakulin, A.V., Korneev, V.A., T. Watanabe and S. Ziatdinov, 2006, Time-lapse changes in tube and guided waves in cross-well Mallik experiment, Expanded abstracts, Annual SEG Meeting. , LBNL-61124

Korneev, V. A. , Bakulin, A.V. and S. Ziatdinov, 2006, Tube-wave monitoring of oil fields, Expanded abstracts, Annual SEG Meeting. , LBNL-61122

Ziatdinov, S., Bakulin, A.V., Kashtan, B.M., Golovnina, S. , V.A. Korneev and A. Sidorov, Tube-wave monitoring at Mallik field: comparing modeled and experimental time-lapse responses, , Expanded abstracts, Annual SEG Meeting. , LBNL-61127.

Daley, T.M., Myer, L.R., Hoversten, G.M. , Peterson John E. and V.A. Korneev, 2006, Borehole Seismic Monitoring of Injected CO₂ at the Frio Site, Expanded abstracts, International CO₂ Symposium, Trondheim, Norway.

Daley, T.M. and V.A. Korneev, 2006, In situ Borehole Seismic Monitoring of Injected CO₂ at the Frio Site, Proceedings CO₂ SQ , LBNL, California, p. 36-38., LBNL-59726

Ziatdinov, S., Bakulin, A.V., Kashtan, B.M., Golovnina, S. and V. Korneev , 2005, Tube waves in producing wells with tubing and casing, Expanded abstracts, Annual SEG Meeting. . BG1.4, p.340-343, LBNL-58567

Korneev, V. A. , Bakulin, A.V. and J.O. Parra, J.O., 2005, Tube-wave Effects in Cross-Well Seismic Data at Stratton Field, Expanded abstracts, Annual SEG Meeting. BG1.4, p.336-339, LBNL-58569

Korneev, V. A. and A.V.Bakulin, 2006, Theory of the Virtual Source Method, Expanded abstracts, EAGE/EAGO/SEG International Conference , October 16-19, 2006, St. Petersburg, Russia., LBNL-61125

Korneev, V. A., (2005), Seismicity Precursors of M6.0 2004 Parkfield and M7.0 1989 Loma Prieta Earthquakes, *Eos Trans. AGU*, 86(52), Fall Meet. Suppl., Abstract S53B-1097

Artamonova, M.S. and V.A. Korneev, (2005), Active Seismic Monitoring for Earthquake Forecasting, *Eos Trans. AGU*, 86(52), Fall Meet. Suppl., Abstract, NG32A-06

N. Fujii, V. Korneev, J. Kasahara, H. Higashihara, S. Goldin, 2005, Active Monitoring in Solid Earth Geophysics, *Eos*, Vol. 86, 4, 2-3.

Alekseev, A. S., Chichinin, I.S. and Korneev, V. A, 2005, Powerful low-frequency vibrators for active seismology, *Bull. Seism. Soc. Am*, Vol.95, No 1, 1-17., LBNL-57495

V. Korneev and R. Nadeau , 2004, Vibroseis Monitoring of San Andreas Fault in California, Proceedings paper of International Workshop in Active Monitoring, Mizunami, 88-95. LBNL-55511

Alekseev A. S, Chichinin I. S., Korneev, V. A., Komissarov V. V., Seleznev V. S., and Emanov A. F. 2004, Powerful Low-Frequency Vibrators and Outlooks of their Application at Monitoring of Engineering Constructions and at Solving Other Problems of Active Seismology, Proceedings paper of International Workshop in Active Monitoring, Mizunami., 3-8. LBNL-55512

Bakulin, A.V., Korneev, V.A., T. Watanabe and S. Ziatdinov, 2006, Time-lapse changes in tube and guided waves in cross-well Mallik experiment, Expanded abstracts, Annual SEG Meeting. , LBNL-61124

Korneev, V. A. , Bakulin, A.V. and S. Ziatdinov, 2006, Tube-wave monitoring of oil fields, Expanded abstracts, Annual SEG Meeting. , LBNL-61122

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